Abstract

A system for competitively allocating video and/or audio resources of a server includes a server receiving and processing at least one of video and audio information and producing at least one output, all outputs of the server together not exceeding resources of the server in terms of at least one of a maximum frame rate, a maximum resolution, and a maximum bit rate, the server including a bid table for recording client bids and an auction thread for evaluating competing client bids with regard to resources requested and price; a network connected to the server; and a plurality of clients connectable to the network and requesting, from time-to-time, access to the at least one of video and audio information and specifying desired resources including at least one of frame rate, resolution, and bit rate, and a bid price for the resources specified, the server responding to each client request by establishing a server thread for each client for supplying requested video and/or audio information, ordering the bids in the bid table according to a priority based on price and desired resources specified, and through the auction thread, by allocating resources requested by clients supplying bids in a decreasing order of the priority until all of the resources have been allocated to clients specifying desired resources and a bid price.

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